

What is claimed is:

1. An optical low pass filter, comprising:

a first birefringence plate that divides an incident ray into two rays;

a second birefringence plate that divides an incident ray into two rays; and

a third birefringence plate that divides an incident ray into two rays,

wherein said first birefringence plate, said second birefringence plate and said third birefringence plate are cemented to each other, light passed through said first birefringence plate passing through said second birefringence plate and then passing through said third birefringence plate,

wherein a separation angle θ_s , representing a difference between separation directions in which adjacent ones of said first, second and third birefringence plates divide their respective incident rays, satisfies a condition:

$$46^\circ \leq \theta_s \leq 60^\circ.$$

2. The optical low pass filter according to claim 1, wherein the separation angle θ_s satisfies a condition:

$$46^\circ \leq \theta_s \leq 52^\circ.$$

3. The optical low pass filter according to claim 1,

wherein when a separation amount, representing a distance by which the two rays divided by one of said first, second and third birefringence plates are away with respect to each other, is denoted by δ_1 for said first birefringence plate, the separation amount for said second birefringence plate is denoted by δ_2 , and the separation amount for said third birefringence plate is denoted by δ_3 , said optical low pass filter satisfies a condition:

$$\delta_1 = \delta_3 \neq \delta_2.$$

4. The optical low pass filter according to claim 3, wherein the separation amount for said second birefringence plate δ_2 satisfies a condition:

$$0.5\delta_1 \leq \delta_2 < 1.0\delta_1.$$

5. The optical low pass filter according to claim 1, wherein the separation angle θ_s is defined by a following equation:

$$\theta_s = |\theta_1 - \theta_2| = |\theta_2 - \theta_3|,$$

where θ_1 is an angle that the separation direction in which said first birefringence plate divides its incident ray forms with respect to a horizontal direction corresponding to a longer side of a rectangular shape of an imaging element to be used together with said optical low pass filter,

θ_2 is an angle that the separation direction in which said second birefringence plate divides its incident ray forms with respect to the horizontal direction, and

θ_3 is an angle that the separation direction in which said third birefringence plate divides its incident ray forms with respect to the horizontal direction.